



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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Michael O. Leavitt  
Governor  
Lowell P. Braxton  
Division Director

August 3, 1998

Norm Haslem  
Ziegler Chemical & Mineral Company  
Star Route  
Little Bonanza  
Vernal, Utah 84078

Re: Review of Amendment, Notice of Intention to Commence Large Mining Operations, Ziegler Chemical & Mineral Company, Ziegler Gilsonite Operations Mine, M/047/013, Uintah County, Utah

Dear Mr. Haslem:

The Division has completed a review of your Shaft 8 submissions prepared by Robert Covington for the existing Notice of Intention to Commence Large Mining Operations for the Ziegler Gilsonite Operations. Information regarding the Shaft 8 proposal was received January 20, 1998 with supplemental information received April 24, 1998 (referred to as an Environmental Assessment), a copy of your letter to the Vernal BLM received May 13, 1998, and a supplemental mine surface facility map received June 15, 1998.

This proposal is for underground mining of gilsonite on federal lease #76312 and adjacent patented land utilizing existing shafts (LB-3, LB-8, LB-8A, Main #1, Main #2, LB-8B) and existing roads on the lease and patented lands. Shafts LB-3 and LB-8 are located on patented land.

Based on the submission information, this proposal would be categorized under the Minerals Rules as an amendment to the existing Large Mining Operations Notice of Intention. After reviewing the information, the Division has the following comments which will need to be addressed before tentative approval may be granted. The comments are listed separately under the applicable Minerals Rule heading. Please format your response in a similar fashion.

The Division will suspend further review of this amendment to the Ziegler Gilsonite Operations Large Mine Notice until your response to this letter is received. If you have any questions in this regard please contact me, Tony Gallegos, Lynn Kunzler, or Tom Munson of

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the Minerals Staff. If you wish to arrange a meeting to discuss this review, please contact us at your earliest convenience. Thank you for your cooperation.

Sincerely,

A handwritten signature in black ink, reading "D. Wayne Hedberg". The signature is fluid and cursive, with the first name "D." and last name "Hedberg" clearly legible.

D. Wayne Hedberg  
Permit Supervisor  
Minerals Regulatory Program

jb

Attachments: Review, Summary Listing of Ziegler Sites

cc: Bud Covington, Consultant for Ziegler  
Stan Perkes, BLM State Office  
Pete Sokolosky, BLM Vernal Field Office  
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## **REVIEW OF NOTICE OF INTENTION TO COMMENCE LARGE MINING OPERATIONS**

**Ziegler Chemical & Mineral Company  
Ziegler Gilsonite Operations Mine  
Shaft 8 Amendment - Lease 76312  
M/047/013**

### **R647-4-104 - Filing Requirements and Review Procedures**

This proposal for the Shaft No. 8 project has been categorized by the Division as an amendment to the existing Large Mining Operations Notice of Intention according to the criteria listed in the Division Policy effective May 22, 1991. The information submitted focused mainly on Shaft 8A and the associated disturbances located on federal lands although the project will also involve disturbances on patented lands. Please note that the Utah Mined Land Reclamation Act and the Minerals Rules apply to mining activities on Federal, State and patented lands.

As a note of clarification, Division files use the name convention of "LB-8" to refer to shaft site 8 on the Little Bonanza vein. Ziegler's submission refers to this same site as B-8 or Shaft 8.

Shaft sites LB-3, LB-8 and LB-8A are currently listed in the Division's large mine permit and included in the disturbed acreage covered by the current bonding in place with the Division. Site LB-8A is listed as being bonded with State Lands. The Division may be able to treat this proposal as reactivation of shaft site LB-8 which is within the current LMO listed as being in a state of suspension with 1.0 acre of disturbance. The information requested in this review letter is needed to determine if this proposal can be handled as a simple reactivation or as an amendment. (AAG)

### **R647-4-104 - Operator's, Surface and Mineral Ownership**

Division records listed site LB-8A as being on state lands. This submission by Ziegler refers to this site as now being on BLM lands. Please explain this change in land ownership and the dates of applicable transactions so we may correct our summary listing. (AAG)

### **R647-4-105 - Maps, Drawings & Photographs**

#### **105.1 Topographic base map, boundaries, pre-act disturbance**

The project area has been previously impacted by mining operations and includes a number of pre-existing disturbances which may or may not be reimpacted by this proposal. The surface facilities map includes a hoist house, compressor house and a waste dump area. Please clarify whether these features are pre-existing or proposed disturbances. (AAG)

#### **105.2 Surface facilities map**

Thank you for the supplemental map of the surface facilities received June 15, 1998. This map was missing from the documents previously received by the Division. (AAG)

### **R647-4-106 - Operation Plan**

#### **106.2 Type of operations conducted, mining method, processing etc.**

Based on a telephone conversation of 5/21/98 between Mr. Covington and Tony Gallegos of the Division staff, it is understood that the Main #1 and Main #2 shafts will not be mined under this proposal, however, these two existing shafts will be closed as part of final reclamation of the features actually utilized in this proposal. The surface disturbance at shaft site LB-8A will be limited to using the shaft as an escapeway for shaft LB-8, or shaft LB-8B. There are no surface facilities proposed at shaft LB-8A. Shaft LB-8 is located on patented land and will be the main shaft used for underground access for miners, supplies, and ore haulage to the surface. (AAG)

The current large mine permit lists shaft sites LB-8 and LB-8A as part of the mining operations. On the Division's summary listing for Ziegler's operations Shaft LB-8 is described as an escapeway for LB-3 and shaft LB-8A is described as existing use. Please identify the location of shaft site LB-3 (also known as B-3) on the appropriate map(s) and provide an estimate of the existing and proposed surface disturbance at this shaft site. Please review the enclosed 12/23/97 summary listing of Ziegler mine sites prepared by the Division, and return a copy of this listing with your corrections. (AAG)

If the Main Shafts #1 and #2 will not be utilized in this proposal, please explain the line items on page ten of the submission under the section "Estimated Acreages Disturbed And To Be Reclaimed" titled "Shaft "Main Shaft" and "Hoist House "Main Shaft." (AAG)

This submission mainly focused on shaft 8A which is located on federal lands. Please describe the uses or nonuse of all existing shafts shown on the Enclosure 2 map (i.e. shafts #8A, Main #1, Main #2, #8B and #9). (AAG)

**106.3 Estimated acreages disturbed, reclaimed, annually.**

Page ten of the January 20, 1998 submission describes the estimated disturbance for the Shaft 8 amendment as approximately 0.8 acres. The submission states there will be no disturbance of new ground. Please verify that this is the total disturbed area utilized under this proposal on patented/private and federal lands. Areas which were previously disturbed which will be utilized in this proposal would need to be included in the estimate of total disturbance for this proposal. Reclamation requirements for these previously disturbed areas which will be reimpacted would take into consideration the pre-existing state of these areas. (AAG)

**R647-4-107 - Operation Practices**

**107.1 Public safety & welfare**

**107.1.11 Closing or guarding shafts & tunnels**

Please describe the safety measures to be in place during active operations for the shafts utilized. (AAG)

**107.1.12 Disposal of trash, scrap, debris**

The disposal of waste rock in the shaft prior to shaft closure is acceptable to the Division. The placement of construction debris and nonhazardous solid waste and trash in the shaft is acceptable to the Division provided these materials allow for a stable shaft closure and are covered with a minimum of four feet of soil materials. Onsite disposal of trash and debris may require approval from the state Division of Solid and Hazardous waste. (AAG)

**R647-4-110 - Reclamation Plan**

**110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed**

Please describe the shafts in the immediate project vicinity which will be closed during final reclamation with reinforced concrete as described in this submission. (AAG)

Based on the 5/12/98 phone conversation we understand the access road to the north of the sacking plant and the associated 1.72 acre ore storage area will be reclaimed at final reclamation, although these features have no direct relationship to this proposal for Shaft 8.

**110.3 Description of facilities to be left (post mining use)**

Please describe the shafts and any mine facilities or structures which are proposed to remain after final reclamation. (AAG)

**110.5 Revegetation planting program**

The seed mix on page 6 (section 2.1.3) includes only 4 species. This mix is unlikely to establish a diverse vegetation ground cover that would be expected for reclamation success. Attached is the recommended seed mix provided to Ziegler in 1996 that would provide for greater diversity and improve conditions for a post-mining land use of grazing and wildlife habitat. (LK)

**R647-4-112 - Variance**

This submission did not contain any variance requests, however, the submission was mainly formatted to satisfy BLM information requirements. Please confirm that no variances from the Minerals Rules (sections R647-4-107 Operation Practices, R647-4-108 Hole Plugging Requirements, and R647-4-111 Reclamation Practices) are requested. Variance requests must be in writing and should follow the format described under section R647-4-112 of the Minerals Rules. Based on this review, Ziegler may need to request variances from topsoil salvage, topsoil replacement, and revegetation success for those previously disturbed areas which will be reimpacted. (AAG)

**R647-4-113 - Surety**

The submission states surety has been provided by bonds and letters of credit which are on file with the BLM covering all of Ziegler's mining operations in the state. Page 11 of the submission estimates reclamation costs for removing one headframe, capping one shaft and reclaiming one shaft site as \$6,000. The Division will need to evaluate the reclamation costs for all surface disturbances (existing and new) on patented and federal lands which will be utilized under this proposal. The Division currently holds a reclamation surety in the amount of \$126,600 for approximately 33.3 acres of disturbance. Shaft sites LB-3 and LB-8 are included in the disturbed acreage covered by the current bond posted with the Division. The bond for site LB-8A is listed as being posted with State Lands and recognized by the Division.

The current MOU between the Division and BLM regarding leasable minerals (dated February 1983) allows the Division to recognize reclamation surety posted with the BLM provided several conditions are met. These conditions state the bond amount must be mutually agreeable to the BLM and Division; the form of the bond must be mutually acceptable; the bond must be for reclamation and general compliance with the terms and conditions of the lease; and the BLM agrees not to release the surety without prior written consent from the Division. Recent correspondence from the BLM State Office regarding bonding lists a line item for rehabilitation of lease U-76312 as \$6,846. The BLM would not be involved with regulation or posting of reclamation surety for mining activities on patented claims, however, these activities would be subject to Division regulations and surety requirements.

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The Division will not be able to determine the amount of reclamation surety for this proposal until the information requested in this review letter has been received. We will coordinate with the BLM to the extent possible under our current MOU to avoid duplicate bonding. (AAG)

**R647-4-115 - Confidential Information**

The information identified as confidential in the submission received by the Division on January 20, 1998 will be filed separate from the information accessible by the public. (AAG)

Attachment: Seedmix  
o:\review\m47-13am.rvw

Recommended Revegetation Species List  
for

**Ziegler Chemical and Mineral Corp.**  
**Independent ZI-95-1 Mine**  
**M/047/013**

Prepared by DOGM February 5, 1996

<u>Common Name</u>	<u>Species Name</u>	<u>*Rate lbs/ac (PLS)</u>
'Hycrest' crested wheatgrass	<u><i>Agropyron cristatum 'Hycrest'</i></u>	0.75
Intermediate wheatgrass	<u><i>Agropyron intermedium</i></u>	2.0
Russian Wildrye	<u><i>Elymus junceus</i></u>	2.0
Indian ricegrass	<u><i>Oryzopsis hymenoides</i></u>	1.5
Ladac Alfalfa	<u><i>Medicago sativa</i></u>	1.0
Yellow sweetclover	<u><i>Melilotus officinalis</i></u>	0.5
Palmer penstemon	<u><i>Penstemon palmeri</i></u>	0.5
Small burnet	<u><i>Sanguisorba minor</i></u>	1.0
4-Wing Saltbush	<u><i>Atriplex canescens</i></u>	1.0
Shadscale	<u><i>Atriplex confertifolia</i></u>	1.0
Rubber rabbitbrush	<u><i>Chrysothamnus nauseosus</i></u>	0.5
Forage kochia	<u><i>Kochia prostrata</i></u>	0.75
Total		12.5 lbs/ac

\*This the recommended broadcast seeding rate.  
If the species are to be drill seeded, decrease the rate by 50%.

**Disturbed Acreage - Mine Sites**  
**Ziegler Chemical & Mineral Company**  
**M/047/013**  
**12/23/97**

Mine Site (1)	Claim or Lease	Location	Acreage Disturbed	Status
I-3		SE1/4 NE1/4 Sec. 16, T9S, R24E	1.38	Active
I-4	Old - Between I-3 and I-5	SW1/4 NE1/4 Sec. 16, T9S, R24E	1.41	Active
I-5	SITLA - ML 851-A	NW1/4 NE1/4 Sec. 16, T9S, R24E	1.20	Active
LB-1				Patented vent shaft only
LB-3		SW1/4 SE1/4 Sec. 16, T9S, R24E	1.14	Active
LB-8	Old Reconditioned Mine Escapeway for LB-3	SE1/4 SE1/4 Sec. 16, T9S, R24E	1.00	Active
LB-8A	SITLA - Shaft in place	SW1/4 SW1/4 Sec. 15, T9S, R24E	1.00	Existing use - Stockpile area
LB-11		NE1/4 NW1/4 Sec. 22, T9S, R24E	1.01	Suspended - Existing - pumping H <sub>2</sub> O
LB-12		NE1/4 NW1/4 Sec. 22, T9S, R24E	1.51	Suspended - Existing - pumping H <sub>2</sub> O
LE-1 Middle		SE1/4 SE1/4 Sec. 30, T9S, R24E	1.10	Active
LE-7				Reclaimed - completed ~2 years ago
C-1 & 2	SITLA - ML 20781	NE1/4 SE1/4 Sec. 29, T10S, R21E	1.24	Reclaimed - unreleased
C-3	SITLA - ML 19868, ML 20779	SW1/4 NW1/4 Sec. 29, T10S, R21E SE1/4 NE1/4 Sec. 30, T10S, R21E	1.50	Shaft sunk ~250' then abandoned & reclaimed at same time ~1996
CB-1	BLM - U-0122693	SW1/4 SE1/4 Sec. 33, T8S, R21E	3.30	Active
Z-1		NW1/4 NW1/4 Sec. 16, T9S, R24E		
Processing Facilities		NW1/4 NW1/4 Sec. 22, T9S, R24E	3.00	
		SW1/4 SW1/4 Sec. 15, T9S, R24E	5.00	
		SW1/4 SE1/4 Sec. 16, T9S, R24E	4.00	
		<b>Total Acreage</b>	<b>19.79</b>	

Notes: (1) I = Independent, LB = Little Bonanza, LE = Little Emma, C = Cottonwood, CB = Cowboy



**Disturbed Acreage - Mine Sites**  
**Ziegler Chemical & Mineral Company**  
**S/047/063**  
**12/23/97**

Mine Site (1)	Claim or Lease	Location	Acreage Disturbed	Status
N-1	SITLA - ML 46896	SW 1/4 NW1/4 Sec. 32, T11S, R24E	4.48	Active
		Total Acreage	4.48	

Notes (1): N= Neal

**Disturbed Acreage - Mine Sites**  
**Ziegler Chemical & Mineral Company**  
**S/047/065**  
**12/23/97**

Mine Site (1)	Claim or Lease	Location	Acreage Disturbed	Status
TT	BLM - UTU-0122694	NE 1/4 NE 1/4, Sec. 3, T10S, R24E	?	Active
		Total Acreage		

Notes (1): TT - Tom Taylor

Ziegler.acr